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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,984	03/07/2002	Bruce J. Serbin	DP-301646	1472

7590 11/26/2003

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EXAMINER

LEON, EDWIN A

ART UNIT	PAPER NUMBER
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2833

DATE MAILED: 11/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/092,984

Applicant(s)

SERBIN ET AL.

Examiner

Edwin A. León

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,4 and 6-13 is/are allowed.
- 6) ☒ Claim(s) 1,2,5 and 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed September 12, 2003 in which Claims 3-4 and 6 have been amended and new Claims 16-20 have been added, has been place of record in the file as Paper No. 7.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 5 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morello et al. (U.S. Patent No. 5,399,110) in view of Endo et al. (U.S. Patent No. 5,338,233). With regard to Claims 1-2, and 15-20, Morello et al. discloses an electrical connection comprising: an elongated solid conductor (10) having a longitudinally extending groove (28); and a terminal (14) having a base portion (lower part of 14), a first wing (46) and a second wing (46), the base portion (lower part of 14) engaging the solid conductor (10), the first and second wings (46) projecting laterally outward and in opposite directions from the base portion (lower part of 14), an outer

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surface (middle groove of 14) of the terminal (14) carried by the base portion (lower part of 14), the first wing (46) and the second wing (46); and the outer surface (middle groove of 14) having a first distal edge portion (tip of 46) carried by the first wing (46) and disposed within the groove (28) and a second distal edge portion (tip of 46) carried by the second wing (46) and disposed within the groove (28), the solid conductor (10) having a portion with a V-shaped cross section that provides the longitudinally extending groove (28). See Figs. 1-8.

However, Morello et al. doesn't show the first wing and the second wing curling about the solid conductor and projecting into the groove, the first wing and the second wing engaging each other within the groove to resist spring-back of the first and second wings, the first and second distal edge portions being engaged to prevent spring-back of the first and second wings out of the groove, first and second rails and the first and second wings curling about the first and second rail, respectively.

Endo et al. discloses a terminal (21) having a first wing (13a-b, 11) and a second wing (13a-b, 11) curling and projecting into a groove (Fig. 5), the first wing (13a-b, 11) and the second wing (13a-b, 11) engaging each other within the groove (Fig. 5) to resist spring-back of the first and second wings (13a-b, 11), first and second distal edge portions (tips of 13a-b, 11) being engaged to prevent spring-back of the first and second wings (13a-b, 11) out of the groove (Fig. 5), first and second rails (27,29) and the first and second wings (13a-b, 11) curling about the first and second rail (27, 29), respectively. See Figs. 1-5.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the terminal of Morello et al. by including first wing and a second wing curling and projecting into a groove, the first wing and the second wing engaging each other within the groove to resist spring-back of the first and second wings, first and second distal edge portions being engaged to prevent spring-back of the first and second wings out of the groove, first and second rails and the first and second wings curling about the first and second rail, respectively as taught in Endo et al. in order to improve the reliability in mechanical and electrical connection between the contact member and the terminal. The method limitations are deemed inherent and therefore read on the combination of Morello et al. and Endo et al. for the reasons stated above.

With regard to Claim 5, Morello et al. discloses an electrical connection comprising: a male pin (10) having a longitudinally extending groove (28), a concave face (upper surface of 28) defining the groove (28), and a convex face (surface below 28) aligned laterally outward from the concave face (upper surface of 28); a terminal (14) having an outer surface (middle groove of 14), an inner surface (lower surface of 14), a first wing (46) and an opposite laterally extending second wing (46); the outer surface (middle groove of 14) of the crimp terminal (14) having a first distal edge portion (tip of 46) carried by the first wing (46) and a second distal edge portion (tip of 46) carried by the second wing (46). See Figs. 1-8.

However, Morello et al. doesn't show wherein the inner surface of the crimp terminal being engaged electrically to the male pin when the crimp terminal is curled

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and crimped about the male pin; and wherein the first and second distal edge portions of the first and second wings are disposed within the groove and extended longitudinally with respect to the male pin, the first distal edge portion being engaged to the second distal edge portion.

Endo et al. discloses a terminal (21) having an inner surface of the crimp terminal (21) being engaged electrically to the male pin (7) when the crimp terminal (21) is curled and crimped about the male pin (7); and wherein the first and second distal edge portions (tip of 13a-b, 11) of the first and second wings (13a-b, 11) are disposed within the groove (Fig. 5) and extended longitudinally with respect to the male pin (13a-b, 11), the first distal edge portion (tip of 13a-b, 11) being engaged to the second distal edge portion (tip of 13a-b, 11). See Figs. 1-5.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the terminal of Morello et al. by having the inner surface of the crimp terminal being engaged electrically to the male pin when the crimp terminal is curled and crimped about the male pin; and wherein the first and second distal edge portions of the first and second wings are disposed within the groove and extended longitudinally with respect to the male pin, the first distal edge portion being engaged to the second distal edge portion as taught in Endo et al. in order to improve the reliability in mechanical and electrical connection between the contact member and the terminal.

With regard to Claims 18-20, the combination of Morello et al. and Endo et al. discloses the claimed invention as explained above except for the conductor being one piece.

Still, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the conductor one piece to simplify the manufacturing of the connector, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 1647 (1893).

Allowable Subject Matter

4. Claims 3-4 and 6-13 are allowed for the reason stated in the Office Action of August 15, 2003.

Response to Arguments

5. Applicant's arguments filed September 12, 2003 have been fully considered but they are not persuasive. In response to Applicant's arguments regarding Claims 1, 2, 5 and 15 that the Morello et al. and the Endo references do not show a terminal crimped to a solid conductor, Applicant misinterprets the principle that claims are interpreted in the light of the specification. Although this feature is found as example or embodiment in the specification, it was not claimed explicitly. Nor were the words that are used in the

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claims defined in the specification to require this limitation. A reading of the specification provides no evidence to indicate that this limitation must be imported into the claims to give meaning to disputed terms. *Constant v. Advanced Micro-Devices Inc.*, 7 USPQ2d 1064.

In response to Applicant's arguments regarding Claims 2 and 15 that the Morello et al. and the Endo references do not show the distal end of the wings disposed in the groove of the conductor, it is the Examiner's opinion that by combining the teachings of the Endo reference with the connector of Morello et al. this limitation would be met. The combination of the two references would result in a conductor having groove and the wings disposed inside the groove.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

6. **THIS ACTION IS MADE FINAL** necessitated by amendment. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

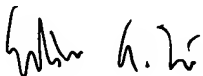
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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (703) 308-6253. The examiner can normally be reached on Monday - Friday 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Edwin A. Leon
AU 2833

P. AUSTIN BRADLEY
SUPERVISORY PATENT EXAMINER
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EAL
November 19, 2003